REMARKS

The Office Action mailed June 29, 2006 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1, 7-12 and 14-19 are now pending in this application. Claims 7-12 have been withdrawn. Claims 1-6 and 13-18 stand rejected. Claims 2-6 and 13 have been canceled. Claim 19 is newly added.

The rejection of Claims 1-6 and 13 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is respectfully traversed. Specifically, independent Claim 1 has been amended to recite how the refrigerant flow is affected by the operational position of the valve. Claims 2-6 and 13 have been canceled

In view of the above Amendment, Applicants respectfully request that the Section 112, second paragraph, rejection of Claims 1-6 and 13 be withdrawn.

The rejection of Claim 15 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,185,948 to Niki et al. (hereinafter referred to as "Niki") in view of U.S. Patent No. 5,272,884 to Cur et al. (hereinafter referred to as "Cur") is respectfully traversed.

Niki describes refrigerator-freezer including a first evaporator that cools the atmosphere in a refrigerating compartment and a second evaporator that cools the atmosphere in a freezing compartment. The refrigerator-freezer also includes a controller for controlling a switching valve in a refrigerating cycle so that a cooling operation is switched between a first operation mode in which refrigerant is supplied to at least to the first evaporator and a second operation mode in which the refrigerant is supplied at least to the second evaporator. When the switching valve is switched to start the cooling operation for a compartment (either the freezer or refrigerator compartment), the corresponding blower immediately begins to operate while the other blower continues to operate for a period of time. See Niki at col. 6, lines 35-39, and col. 7, lines 43-48.

Cur describes a method and apparatus for sequentially operating a refrigeration system with multiple evaporators in which only one evaporator is operated at a time and is run until a detected demand for cooling associated with that evaporator is satisfied, or until a predetermined time period has elapsed. The refrigeration system in Cur includes a solenoid valve attached to the refrigeration line and a solenoid valve attached to the freezer line. The system also includes a condenser fan that reduces the temperature difference between the condenser and the ambient temperatures and that can be run at various speeds.

Claim 15 recites a refrigerator including a sealed refrigeration system. The refrigerator includes "a fresh food compartment including a fresh food evaporator positioned therein, a fresh food fan coupled to said fresh food evaporator and operable for cooling said fresh food compartment; a freezer compartment including a freezer evaporator positioned therein, a freezer fan coupled to said freezer evaporator and operable for cooling said freezer compartment; a compressor operationally coupled to said fresh food evaporator and said freezer evaporator; a condenser including a condenser fan coupled to said compressor; a three-way valve coupled to said fresh food and freezer compartments via a fresh food metering device and a freezer metering device, said three-way valve configured to operate between a plurality of operational positions; and a control logic grid in operational control of said fresh food fan, said freezer fan, said condenser fan, and said compressor, said control logic grid configured, with the three-way valve in a first operational position of said plurality of operational positions, to continue to operate said fresh food fan for a first time period and to activate said freezer fan after a second time period, and with the three-way valve in a second operational position of said plurality of operational positions, to continue to operate said freezer fan for a third time period and to activate said fresh food fan after a fourth time period."

Neither Niki nor Cur, considered alone or in combination, describes or suggests a refrigerator as recited in Claim 15. More specifically, neither Niki nor Cur describes or suggest a refrigerator including a control logic grid in operational control of a fresh food fan and a freezer fan such that when the three-way valve is in a first operational position, the fresh food fan continues to operate for a first time period and the freezer fan is activated after a second time period, and when the three-way valve is in a second operational position, the

freezer fan continues to operate for a third time period and the fresh food fan is activated after a fourth time period. Rather, Niki merely describes a system that when the valve is switched to allow refrigerant to flow to one compartment, the blower attached to that compartment is immediately activated. Cur simply describes a refrigeration system that uses two separate solenoid valves.

Accordingly, for at least the reasons set forth above, Claim 15 is submitted to be patentable over Niki in view of Cur.

The rejection of Claims 1-6 and 13-17 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,952,930 to Rafalovich et al. (hereinafter referred to as "Rafalovich") is respectfully traversed.

Rafalovich describes a refrigerator including a fresh food evaporator, a freezer evaporator, and a three-way valve. During operation of the refrigerator, a three-way valve 192 with a step motor 194 is utilized to switch refrigerant flow from one evaporator to another depending on the temperatures in fresh food and freezer compartments 102 and 104. Step motor 194 operates by a series of impulses that move valve 192 incrementally in a plurality of steps between a plurality of operation modes or positions. When valve 192 changes between operation positions in the refrigerant circuit, the transition provides the best energy efficiency of the system.

Claim 1 recites a method for regulating refrigerant flow in a sealed refrigerant system. The method includes "a fresh food path to a fresh food evaporator in a fresh food compartment and a freezer path to a freezer evaporator in a freezer compartment wherein the fresh food path and the freezer path are in flow communication with a compressor, said method comprising: providing a three-way valve in flow communication with the compressor for regulating refrigerant flow through the fresh food path and the freezer path; directing the refrigerant flow by moving the three-way valve to one operational position of a plurality of operational positions, the plurality of operational positions comprising a first operational position for directing the refrigerant flow from the fresh food path to the freezer path and a second operational position for directing the refrigerant flow from the freezer path to the fresh food path, with the three-way valve in the first operational position, a fresh food fan

coupled to the fresh food evaporator continues to operate for a first time period and a freezer fan coupled to the freezer evaporator is activated after a second time period, and with the three-way valve in the second operational position, the freezer fan continues to operate for a first time period and the fresh food fan is activated after the second time period."

Rafalovich does not describe or suggest a method for regulating refrigerant flow as recited in Claim 1. More specifically, Rafalovich does not describe a refrigerator including a three-way valve, freezer fan, and fresh food fan such that when the three-way valve is in a first operational position, the fresh food fan continues to operate for a first time period and the freezer fan is activated after a second time period, and when the three-way valve is in a second operational position, the freezer fan continues to operate for a third time period and the fresh food fan is activated after a fourth time period. Rather, Rafalovich simply describes a refrigerator having a three-way valve with a step motor that operates the valve by a series of impulses. When the valve changes between operational positions in the refrigerant circuit, the transition provides the best energy efficiency of the system.

Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Rafalovich. Claims 2-6 have been canceled.

Claim 13 has been canceled and Claim 14 has been amended to depend from 1. When the recitations of Claim 14 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claim 14 likewise is patentable over Rafalovich.

Claim 15 recites a refrigerator including a sealed refrigeration system. The refrigerator includes "a fresh food compartment including a fresh food evaporator positioned therein, a fresh food fan coupled to said fresh food evaporator and operable for cooling said fresh food compartment; a freezer compartment including a freezer evaporator positioned therein, a freezer fan coupled to said freezer evaporator and operable for cooling said freezer compartment; a compressor operationally coupled to said fresh food evaporator and said freezer evaporator; a condenser including a condenser fan coupled to said compressor; a three-way valve coupled to said fresh food and freezer compartments via a fresh food metering device and a freezer metering device, said three-way valve configured to operate between a plurality of operational positions; and a control logic grid in operational control of

said fresh food fan, said freezer fan, said condenser fan, and said compressor, said control logic grid configured, with the three-way valve in a first operational position of said plurality of operational positions, to continue to operate said fresh food fan for a first time period and to activate said freezer fan after a second time period, and with the three-way valve in a second operational position of said plurality of operational positions, to continue to operate said freezer fan for a third time period and to activate said fresh food fan after a fourth time period."

Rafalovich does not describe or suggest the refrigerator in Claim 15. More specifically, Rafalovich does not describe or suggest a refrigerator including a control logic grid in operational control of a fresh food fan and a freezer fan such that when the three-way valve is in a first operational position, the fresh food fan continues to operate for a first time period and the freezer fan is activated after a second time period, and when the three-way valve is in a second operational position, the freezer fan continues to operate for a third time period and the fresh food fan is activated after a fourth time period. Rather, Rafalovich simply describes a refrigerator having a three-way valve with a step motor that operates the valve by a series of impulses. When the valve changes between operational positions in the refrigerant circuit, the transition provides the best energy efficiency of the system.

Accordingly, for at least the reasons set forth above, Claim 15 is submitted to be patentable over Rafalovich.

Claims 16 and 17 depend from independent Claim 15. When the recitations of Claims 16 and 17 are considered in combination with the recitations of Claim 15, Applicants submit that dependent Claims 16 and 17 likewise are patentable over Rafalovich.

For the reasons set forth above, Applicants respectfully request that the Section 102(e) rejection of Claims 1-6 and 13-17 be withdrawn.

The rejection of Claim 15 under 35 U.S.C. § 103(a) as being unpatentable over Rafalovich and in view of U.S. Patent No. 4,840,037 to Yamada et al. (hereinafter referred to as "Yamada") is respectfully traversed.

Rafalovich is described above.

Yamada describes a refrigerator having an accumulator (53). Notably, Yamada does not describe a control logic grid in operational control of a three-way valve, a freezer fan, and a fresh food fan such that when the three-way valve is in a first operational position, the fresh food fan continues to operate for a first time period and the freezer fan is activated after a second time period, and when the three-way valve is in a second operational position, the freezer fan continues to operate for a third time period and the fresh food fan is activated after a fourth time period.

Neither Rafalovich nor Yamada, considered alone or in combination, describes or suggests a refrigerator as recited in Claim 15. More specifically, neither Rafalovich nor Yamada, considered alone or in combination, describes or suggests a refrigerator including a control logic grid in operational control of a fresh food fan and a freezer fan such that when the three-way valve is in a first operational position, the fresh food fan continues to operate for a first time period and the freezer fan is activated after a second time period, and when the three-way valve is in a second operational position, the freezer fan continues to operate for a third time period and the fresh food fan is activated after a fourth time period. Rather, Rafalovich simply describes a refrigerator having a three-way valve with a step motor that operates the valve by a series of impulses. When the valve changes between operational positions in the refrigerant circuit, the transition provides the best energy efficiency of the system. Yamada simply describes a refrigerator having an accumulator.

For the reasons set forth above, Applicants respectfully submit that Claim 15 is patentable over Rafalovich in view of Yamada.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Favorable action is respectfully solicited.

Respectfully submitted,

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